CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ANCIENT INDIAN COINAGE

(A Select Bibliography)

4796

BY

BAL KRISHAN M.A.

24796

The
Research Institute
of
Ancient Scientific Studies
NEW DELHI

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ANCIENT INDIAN COINAGE

(A Select Bibliography)

BY

BAL KRISHAN M.A.

The Research Institute of Ancient Scientific Studies NEW DELHI

MOTILAL BANARSIDASS JAWAHAR NAGAR DELHI-7 ASULLAH MARG

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Published by :
Shri Ram Swarup Sharma

Director :
The Research Institute of Ancient Scientific Studies.
26/139-140. West Patel Nagar, New Delhi-8.

Contains Ancient Coinage of India—a Survey
By
BAL KRISHAN & G.D. KHULLAR

With a foreword
by
Sri C. SIVARAMAMURTI
Director, National Museum. New Delhi.

4786

© **Copyright Reserved by the Publisher**

1968

Price **Rs. 15.00**

Printed at Padam Shree Prakashan & Printers 12, Chamelian Road, Delhi-6.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Foreword

Shri Bal Krishan, Librarian, National Museum, has already prepared several valuable bibliographies on select subjects, like sculpture, bronzes, iconography, architecture, etc. The present select bibliography on Ancient Indian Coins by him is another of his valuable contributions to a bibliographical series that he has planned and hopes to complete in the next few years. The study of Indian coins is a specialised one and it has not attracted as many votaries as some more popular subjects, like arts and crafts. The study of Indian numismatics is exceedingly important as a great source of Indian history and historians have always laid stress on this particular science.

Great collections of coins exist in several museums all over the country and there are a number of very important articles and books that have freely discussed this material. It cannot be said that these studies are adequate as the scope for this is very large and the lack of good bibliographies on individual groups of coins would be a great handicap for one devoted to research in this field. The present bibliography confines itself to Ancient Indian Coins and this will be followed by several similar ones on other phases.

I am sure the world of scholars would be thankful to Shri Bal Krishan for making this useful bibliography available and let us hope to have more of such material from his pen.

(C. Sivaramamurti)
Director,
National Museum,
New Delhi.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Preface

'Coins' are perhaps the most important source for reconstructing ancient Indian history. The coins of Indo-Bactrian Greeks, the Indo-Scythians, the Indo-Parthians have been the sole source of our knowledge of these dynasties. Similarly, the coins of the Kushanas, and the Guptas constitute an excellent additional source of our information in regard to these dynasties. Further, the economic conditions and religious history of various periods of ancient India can be studied with the help of coins.

Coins were in use and in wide circulation in India long before the beginning of the Christian era. They have been mentioned in the Mahabharata as well as works of Manu, Panini, the Buddhist Jataka stories and other Buddhist and Jaina works.

The study of Indian coins is, therefore, very important as a rich source of ancient Indian history. Many scholars are in fact already carrying on research in this field. To promote and facilitate study and research in this fascinating subject, it is necessary to have a bibliography covering various periods.

This select bibliography includes literature of fundamental importance as well as of general interest. Wherever, there is no specific mention of literature pertaining to a particular dynasty, it would be worthwhile to look up entries in the 'general' section where comprehensive books are listed.

It is hoped this bibliography would be of great use to those who are engaged in the study of ancient Indian coins.

Bal Krishan

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CONTENTS

	Sl. Nos.
Foreword by Sri C. Sivaramamurti	
Preface	
Ancient Indian Coins—a survey by B.K. & G.D.K.	
General	1-46
Earliest Coinage of India	47-78
Indo-Greeks, the Sakas and the Pahlavas	79-96
Kushanas	97-106
Nagas	107-108
Saka Satraps of W. I.	109-113
Guptas	114-147
Huns	148-149
Vardhanas	150
Medieval Hindu India.	
(a) General	151-154
(b) Rajput	155-156
(c) Kashmir	157-158
Kingdoms of the Deccan	
(a) Satavahanas	159-166
(b) Ikshvakus	167
(c) Kalachuries	168
(d) Vishnukundins	169
(e) Chalukyas	170-171
(f) Yadavas	172
(g) Kakatiyas	173-174
Kingdoms of South.	
(a) General	175-180
(b) Pallavas	181
(c) Cholas	182
(d) Pandyas	183
(e) Kadambas	184
(f) Vijayanagar	185-186
Technique of casting coins	187
Addenda.	188-194

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

GENERAL

1. **Agrawala, R. C.**

Coins, weight, and measures in the Bakhshali Manuscript. Journ. Numis. Soc of India, Vol. 16, Pt. 2, 1954, pp. 231-235.

The Bakhshali Mss. datable to 3rd or 4th centuries A.D. is an ancient Indian treatise on Mathematics. It contains useful data on numismatics.

2. **Agrawala, R. C.**

Numismatic data in the Ganitasara.
JNSI, Vol. 20, Pt. I, 1958, pp, 38-41.

"The Ganitasara of Sridhara and its Medieval Gujarati commentary throw valuable light on the contemporary coin denominations".

3. **Agrawala, R. C.**

Numismatic terms in the Vratarāja Khanda.
JNSI, Vol. 17, Pt 2, 1955, pp. 106-107.

The Mss of this treatise dated 1736 A. D. contains numismatic terms.

4. **Agrawala, R. C.**

Rupaka—a coin denomination.
JNSI, Vol. 19, Pt. 2, 1957, pp. 115-120.

Gives literary and epigraphical references to Rupaka as a coin denomination.

5. **Agrawala, V. S.**

Ancient coins as known to Panini.
JNSI, Vol. 15, Pt. I, 1953, pp. 27-41

Important data bearing on the earliest Indian coinage found in the Arhiya section of the Astadhyayi has been analysed.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

6. **Agrawala, V. S.**

Coin data in the Mahabharata.

Annals of the Bhandarkar Inst. Vol. 38, Pts. 3-4, 1957. pp. 161-174.

Records references to coin names of the punch marked series *viz.* Nishka, Suvarna, Satamana, Sana and Prati found in the Mahabharata.

7. **Agrawala, V. S.**

Coin data in the Mahabharata.

JNSI. Vol. 18, Pt. 2. 1956, pp. 143-156.

Records references to coins of the punch-marked series such as Nishka. Suvarna, Satamana, Sana. Prati found in the Mahabharata.

8. **Agrawala, V. S.**

Coin names in the Angavijja.

JNSI, Vol. 19, Pt. I, 1957. pp, 20-31.

The Angavijja, a canonical Jaina work of Circa 3th-4th the century A. D. contains valuable numismatic data.

9. **Altekar, A. S.**

Origin and early history of coinage in ancient India.

JNSI. Vol. 15, Pt. I, 1953, pp. 1-26.

Scrutinises various theories regarding the foreign origin of ancient Indian coinage such as Greek, Achaemenian and Babylonian. After examining literary evidences regarding the origin and early history of the coinage, from c. 2500 B. C. to 300 B. C., the author concludes that the silver and copper currency of ancient India originated about 800 B. C.

10. **Altekar, A. S.**

Relative prices of metals and coins in ancient India.

JNSI. Vol. 2, 1940, pp. 1-13.

Discusses the question of the relative value of gold silver and copper and their coins in ancient India.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

11. Awasthi, A. B. L.

Numismatic gleanings from Manjusri Mulakalpa.

JNSI, Vol. 26, Pt. I, 1964, pp. 47-52.

On various denominations of coinage in ancient India as mentioned in Manjusrimulakalpa, a famous Buddhist text.

12. Bajpai, K. D.

Authority of minting coins in ancient India.

JNSI, Vol. 25, Pt. I, 1963, pp. 17-21, I Pl.

Describes a copper coin bearing the name 'Gandhikas' to prove that traders' guilds also issued coins in ancient India.

13. Bannerji, R. D.

Prachin Mudra.

Kashi, Nagri Pracharini Sabha, 1981 s. 5, 269, 18p., 20 pls. 18cm.

An excellent introduction to ancient Indian coins in Hindi.

14. Bhandarkar, D. R.

Lectures on ancient Indian numismatics. Calcutta, the University, 1921. 12, 229p. 21cm.

A rich resource in ancient coinage of India. The aspects touched are :

1. Importance of the study of Numismatics.
2. Antiquity of coinage in India.
3. Karshapana : its nature and antiquity.
4. Science of coinage in ancient India.
5. History of coinage in ancient India.

15. Bidyabinod, B. B.

Supplementary catalogue of the coins in the Indian Museum, Calcutta Non-Mahammadan Series, Vol. I.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Calcutta, Supdt. Govt. Printing, 1923. viii, 103p, I pl. 25 cm. Covers punch-marked, Bactrian and Indo-Greek, Indo-Parathian, Kushan, Guptas, Western, Satraps, Traikutaka, Maukhari, Vardhan, Malawa, Naga, etc. coins.

16. Brown, C. J.

Coins of India.

Calcutta, Association Press, 1922. 120p, 12pls. 18cm (Heritage of India Series)

An excellent introduction to the study of Indian coinage from the earliest times to the Mughal period.

17. Chakrabortty, S.

Currency problems of ancient India.

Mymensingh, the author. n. d. 72p., 23cm.

These lectures deal with (1) Evolution of coinage and the choice of metals. (2) The weight systems—the legal tender coins and their tokens. (3) Currency systems and the metallic ratio.

18. Chakrabortty, S. K.

Study of ancient Indian numismatics (indigenous system) from the earliest times to the rise of the Imperial Guptas (third century A.D.) with special reference to Northern India. Mymensingh, the author. 1931. v, 242p. 18cm.

An interesting study of early Indian Numismatics.

19. Chakrabortty, S. K.

The state in relation to coinage in ancient India.

I. H. Q, Vol. 6, No. 3, 1930, pp. 529-537.

In regard to the institution of coinage the author suggests that "There is absolutely no doubt that even if the punch-marked coinage owed its origin to private enterprise, yet at very early time, even long before

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

the Maurya period, the coinage had definitely come under State control".

20. Choudhary. R. K.

Some technical numismatic terms as gleaned through inscriptions.

Ind. Num. Chron, Vol. 2, Pt. I, 1961, pp. 153-160.

Explains numismatic terms as are available from inscriptional sources.

21. Cunnigham, A.

Coins of ancient India from the earliest times down to the seventh century A. D., London. Curitch, 1891, ix, 118 p., 22cm.

"Treats of the coins of ancient India from the earliest times down to the end of the 6th Century A. D. The well-known coins of the Satraps of Saurashtra and of the Gupta kings of Magadha are not included."

22. Gairola, T. R.

Density and percentage composition of metals in coins stuck in alloys (Gold Coins). JNSI, Vol. 16, Pt. 2, 1954. pp. 268-269.

Suggests a method to detect fake gold coins.

23. Gupta, P. L.

Numismatic data in the Arthasastra of Kautalya.

JNSI, Vol. 22, Pts. 1-2, 1960, pp. 13-37.

Investigates the entire material on numismatics available in Arthasastra.

24. Jai Prakash.

On ancient Indian coin legends.

JNSI, Vol. 23, 1961, pp. 241-258.

Traces the development of Indian coin legends up to the Indo-Greeks.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

25. Kameshwar Prasad.

Some remarks on money and its value as gathered from Buddhist literature.

Ind. Num. Chron., Vol. 2, Pt. I, 1961, pp 23-34.

References found in Buddhist literature have been examined.

26. Kar, R. C.

Dravidian origin of Indian coinage.
PIHC, Vol. 3, 1939, pp. 189-196.

27. Kosambi, D. D.

On the origin and development of silver coinage in India.
Current Science, Vol. 10, 1941, pp. 395-400.

28. Lallanji Gopal,

Right of minting coins in ancient India. Jour. And. His. Res. Soc. Vol. 26, 1960-61. pp. 149-154.

A general survey.

29. Master, A.

Arthasastra on coins and minting.

JPASB, Vol. 23, Numis. Supplement No. 40 for 1926-27, pp. N9-N21.

On terms and organisation.

30. Prinsen, J.

Essays on Indian antiquities.

Historic, Numismatic and Palaeographic, ed. by E. Thomas. London, 1858, 2 vols, 22cm.

Contains useful material on the coinage of India.

31. Rapson, E. J.

Indian coins.

Strassburg. V. V., Karl J. Trubner, 1897, 41p., 5pls. 25cm.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Covers coinages of ancient and medieval India from the earliest times to 14th century A. D. Muslim coinage is not included.

32. Ray, S. C.

Coins in Kalidasa's Malavikagnimitram.
JNSI, Vol. 26, Pt. I, 1964, pp. 101-102.

Draws attention to the reference on use of gold coins (suvarna) in Malavikagnimitram.

33. Ray, S C.

Stratigraphic evidence of coins in Indian excavations and some allied issues.

Varanasi, N. S. I, 1959, 41p, tables. 25cm. (Num. Notes and Monographs No. 8).

On the role of coins in dating the strata in excavations.

34. Sarkar, A. K.

Coins and weights of ancient India.

I. H. Q., Vol. 7, 1931, pp. 689-702.

Examines the unique position of Karsapana in the system of Indian currency.

35. Shah, U, P.

Numismatic data in early Jain literature.

JNSI, Vol. 14, 1952, pp. 107-110.

On coin denominations as found in Jaina literature.

36. Sircar, D. C.

Buddhaghosha and Indian Numismatics

JNSI, Vol. 13, 1951, pp. 183-191.

The works of Buddhaghosha contain useful information on Numismatics.

37. Sircar, D. C.

Kautilya and Indian Numismatics.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

J. N. S. I, Vol. 14. 1952, Pp. 128-143.

Examines the evidence of the Arthasastra in regard to Pana and Dharana.

38. Sircar, D. C.

The Sana.

JNSI, Vol. 16 Pt. I, 1954. pp. 40-50.

Examines the literary traditions regarding the weight of silver coin Sana which was 40 Ratis according to author.

39. Sircar, D. C.

The Satamana.

JNSI, Vol. 15, Pt. 2, 1953, pp. 136-150.

Examines the literary and epigraphic evidence regarding the ancient Indian gold and silver currency called Satamana and suggests that it weighted 320 Ratis.

40. Sivaramamurti, C.

Numismatic parallels of Kalidasa.

Madras, Sakti Karyalayam, 1945, xvi, 40p, 28 figs.

In this valuable booklet the author gives examples of pictorial and poetic features of Indian coins which were inspired by Kalidasa's stanzas.

41. Smith, V. A.

Catalogue of the coins in the Indian Museum, Calcutta including the cabinet of the Asiatic Society of Bengal, Vol, I, Oxford Clarendon Press, 1906. xviii, 346 p 31 pls. 24cm.

This comprehensive and authoritative work covers in 24 sections grouped in 3 parts various classes of coins from ancient times.

Part I deals with the early foreign dynasties and the Guptas. Part II treats of ancient coins of Indian types.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Part III—is devoted to Sassanian coins of Persia, Medieval coins of Northern and Central India, coins of South India, etc. The medieval coinage of Ceylon and coins of Arakans and other places also find a place in the concluding parts of the Catalogue.

42. Srivastava, B.

Weights and measures in ancient India.

JNSI, Vol 25, Pt. 2, 1963, pp. 139-144.

A historical survey from earliest times upto Circa 3rd cent. A. D.

43. Thakur, Upendra.

Mints and minting in India.

JNSI, Vol. 23, 1961, pp. 175-197.

A general survey covering the ancient medieval and modern periods.

44. Thomas Edward.

Ancient Indian weights.

London, Trubner and Co., 1874, 8, 74p. 30cms (Marsden's Numismata Orientalia, Pt. I)

The subject has been discussed in four groups : 1. Weights and their corresponding measures. 2. Money, under its historical aspect. 3. Coins, proper as distinguished from Bullion. 4. Weights of the normal Indian coins tested by their coincidence with the later medieval mint issues of the land.

45. Tiwari, J. N.

Survey of Indian Numismatography.

JNSI, Vol. 23, 1961, pp. 21-43,

A historical survey in regard to pre-Muhammadan coinage (1738-1950).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

46. Upadhyaya, V. D.

Bharatiya Sikke.

Prayaga, Bharati-Bhandar, v, 2007. (1948). 259, 2. 5, 7p, 19 pls. 22cm.

This book in Hindi on Indian coins covers the period from earliest times to the period of East India Company.

EARLIEST COINAGE OF INDIA

47. Allan, John.

Catalogue of the coins of ancient India.
London, Trustees of the Museum, 1936. clxvii, 318. 6p. 46 pls. 22cm.

"Deals with the coins issued by native rulers from the earliest times to about A. D. 300. The catalogue has been arranged under five heads :

Part I—Various early single type silver coins.
Part II—Silver punch-marked coins.
Part III—Uninscribed cast copper coins.
Part IV—Punch-marked copper coins.
Part V—Tribal coins.

48. Allan, John.

Notes on the punch-marked, local Taxilan and Greek coins. In Taxila by Sir John Marshall. Cambridge, the Univ. Press, 1951, Vol. 2, pp. 853-863.

"The coins found at Taxila fall into four classes corresponding to four periods of occupation of the city. The great majority belong to three groups : The local autonomous coins of the city.

The coins of the Sakas and Pahlavas (Parthians) and of their successors but equally well defined are the coins region from the time to their conquest until supplanted by the Sakas."

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

49. Aravamuthan, T. G.

Notes on punch-marked puranas.

JNSI, Vol. 10, Pt. I. 1948, pp. 1-16, 1 pl.

Describes the special features of the various varieties of punch-marked puranas.

50. Banerjea, J. N.

Coinage.

In comprehensive history of India, ed. by K.A.N. Sastri. Bombay, Oriental Longmans, 57, Vol. 2, pp. 777-809, 9 pls. A useful chapter on coinage of the Mauryas and Satavahanas (325 BC to AD 300).

51. Banerjea, J.N.

Interpretation of a fire symbol on some tribal coins of ancient India.

JNSI, Vol. 22, Pts. 1-2, 1960, pp. 43-46.

52. Bhattacharya, P. N.

Hoard of silver puch-marked coins from Purnea. Delhi, Manager of Publications, 1940, vi, 96p. 12 pls, 31cm.

(Memoire of the A. S. I. No. 62).

Out of a lot of 2,873 coins, 1,703 pieces have been described here. There is useful material on punch-marked coins in the introduction.

53. Chakrabortty, S. K.

Tribal coins of Northern India.

JBASB. Letters third series, Vol. 2, No. 3. 1936. Numismatic Suppl. No. 46 for 1935-36, pp. N31-N97.

The various aspects concerning tribal coins such as the weight systems, the metals, shape, size and the system of manufacture, the legends, the symbols of the types, the provenance and description of coins, etc. is discussed.

54. Dani, A. H.

Indian punch-marked coins a new approach. Jr. of the Asiatic Soc. of Pakistan. Vol. I, No. I, 1956, pp. 109 120.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Draws a distinction between coinage and currency and coinage and weight system.

55. Dani, A. H.

Punch-marked coins in Indian archaeology.

JNSI. Vol. 22, Pts. 1 2, 1960, pp. 1-12.

56. Dikshit, M. G.

Coins from the Tripuri excavations.

JNSI, Vol. 16, Pt. I, 1954, pp. 65-71.

Describes a hoard of 28 copper and lead coins found at Tripuri, in Madhya Pradesh which consists of (1) Punch-marked coins, (2) coins of the Tripuri Republic (3) Coins of Sri Satavahana Satakarni I or II.

57. Durga Prasad.

Classification and significance of the symbols on the silver punch-marked coins of ancient India.

JPASB, Vol. 30, No. 3, 1934, Numismatic Supple. (No. 45) pp. 5N-59N. 32 pls.

A scholarly treatise on the subject. Describes the symbols to show that they resemble the Mudras mentioned in the Sanskrit texts of the Medieval period.

58. Durga Prasad.

Observations on different types of silver punch-marked coins, their periods and locale

JRAS, Bengal. Numis. Supplemet. No. 47 for 1937-38 pp. N51-N92, 5 pls.

A detailed study of various aspects of silver punch-marked coins.

59. Gupta, P. L.

Amaravati hoard of silver puuch-marked coins. Hyderabad, Govt. of A. P., 1963, ii, 153p. 31 pls. 30 cms.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

This informative monograph would be of immence help in studying various problems in regard to punch-marked coins.

60. Gupta, P. L.

Punch-marked coins from Vaisali.

Ind. Num. Chron. Vol. 2, Pt. I, 1961, pp. 13-22, I pl.

Makes some observations on the reverse marks of the Mauryan coins which the author, feels should be borne in mind while classifying punch-marked coins.

61. Gupta, P. L.

Sahet-Mahet hoard of silver punch-marked coins.

JNSI, Vol. 27, Pt. I, 1965. pp. 62-64

This hoard, probably of 50 coins belonged to Kosala Janapad.

62. Gupta, P. L.

Some observations on Parsa Dayarma hoard of silver punch-marked coins.

JNSI, Vol. 27, Pt. I, 1965, pp. 1-20, I pl.

Makes a few observations on the identification of the varieties of the coins and their symbols in this hoard.

63. Jayaswal, K. P.

Early signed coins of India.

J. B. O. R. S., Vol. 20, Pt. 3-4, pp. 279-308, 2, pls.

On later Maurya coins, Sunga coins, coins of Kanvayana dynasty.

64. Jayaswal, K. P.

Some coins of the Mauryas and Sungas.

JRAS, of G. B. and Ireland, 1935, pp. 789-92.

A note on a lecture by Jayaswal wherein he proves that the Mauryas and the Sungas had their own coinages.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

65. Lahiri, Bela.

Coin types of kings with Mitra-ending names-Varanasi, N. S. I. 1959. 16p. 24cm. (Numismatic notes and Monographs No. 7).

Lists coins of the Sunga-Kanva period of second first centuries B. C. belonging to Madhyadesa and bearing Mitra-ending names for their rulers.

66. Lahiri, Bela.

Problem of the so-called Mitra rulers of Northern India.
Vol. 20. Pt. I, 1958, pp. 123-143.

".....a comparative study of their coins will show that the respective peculiarities of different series of these local and tribal coins are so well marked that we cannot attribute them to single dynasty".

67. Marshall, Sir John.

Coins.

In Taxila-an illustrated account of archaeological excavations carried out at Taxila.

Cambridge, the Univ. Press, 1951, Vol 2, pp. 751-794.

At Taxila coins of great variety were recovered. The author here deals with

(i) Local copper coinage of Taxila.
(ii) Coins of the Greeks.
(iii) Coins of the Sakas and Parthians.
(iv) Kushan and later coins.

68. Narain, A. K.

Notes on the chronology of the punch-marked coins.
JNSI. Vol. 19, Pt. 2, 1957 pp 99-106.

".....there is hardly any reason to regard the evidence of the Taxila hoards as of great value for the determination of a relative chronology of punch-marked coinage".

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

69. Roy, S. S.

Coins of Rajgir.

JRASBL, Third Series, Vol. 2, No. 3, 1936, Numismatic supplement for 1935-36, pp. 9-13.

Describe some cast and single die copper coins from Rajgir.

70. Roy Choudhary, Chittaranjan.

A catalogue of early Indian coins in the Asutosh Museum Pt. I, Calctta, Univ. of Calcutta, 1962. x, 45p. 10 pls, 25cm.

Describes early Indian coins up to Circa 3rd century A. D.

71. Sankarananda, Swami.

Legends on punch-marked coins.

JNSI. Vol. 11, Pt, I, 1950, pp. 11-25.

Presents a new view-point on the problem of the decipherment of the symbols on the punch-marked coins.

72. Shivaji Singh.

Parasa Dayarama hoard of silver punch-marked coins.

JNSI, Vol. 26, Pt, 2, 1964, pp. 131-156, 3. pls.

I append descrones a hoard of 167 coins found at Parasa Dayarama village in Gorakhpur Distr., classifies the coins on scientific basis and studies their symbols.

73. Sircar, D. C.

Issue of punch-marked coins.

JNSI, Vol. 23, 1961, pp. 197-302.

Maintains that the punch-marked coinage was a private one issued by guilds and silver-smiths.

74. Unnithan, N. G.

Eyyal hoard of silver punch-marked and Roman coins.

Describes a hoard found in the Eyyal village (Trichur Distt.) of Pre-Mauryan, Mauryan and Roman coins

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and suggests "that Kerala had an extensive foreign and inland trade at a fairly early date".

75. Walsh, E. H. C.

Notes on the silver punch-marked coins and the copper punch-marked coins in the British Museum.

JRAS of G. B. and Ireland, 1941, pp. 223-232.

Gives useful information on the silver punch-marked coins of the Later Thick class of the Maurayan period, the copper punch-marked coins, the Tribal Coins, in the British Museum.

76. Walsh, E. H. C.

Paila hoard of punch-marked coins.

JNSI, Vol. 2, 1940, pp. 15-78. illus.

Examines a hoard of 1,014 silver punch-marked coins found at Paila in U. P. with reference to their classification, significance of the marks, relative age of the coins, weight of the coins etc.

77. Walsh, E. H. C.

Punch-marked coins from Taxila.

Delhi, A. S. I, 1939, iv, 164p, 48pls. 31cm (Memoire of the A.S.I. No. 59).

"An examination of a hoard of 1,171 silver punch-marked coins of the older class, long Bar coins and minute coins found in the Bhir Mound at Taxila in 1924 and a hoard of 167 deoased silver punch-marked coins of the later Class found in the Bhir-Mound at Taxila in 1912".

78. Walsh, E. H. C.

Two hoards of silver punch-marked coins found in the Bhir mound at Taxila.

In Taxila by Sir John Marshall, Cambridge, the University Press, 1951. Vol. 2. pp. 843-852.

"Describes a hoard, of 1, 167 coins of the older kind found in 1924 and a hoard of 166 coins of the later kind found in 1913".

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Indo-Greeks, the Sakas and the Pahlavas.

79. Altekar, A. S.

Some rare and interesting Indo-Bactrian and Indo-Scythian coins.

JNSI, Vol. 6, 1944, pp. 11-13. I pl.

Describes coins of Eukratides, Holiokles Heunaeus and Asilizes.

80. Altekar, A. S.

Some rare Indo-Bactrian coins.

JNSI. Vol. 8, Pt. I, 1946, pp. 51-59, i pl.

Describes rare and unique silver coins of Menander, Antialkidas, Philoxenus, Demetrius, Diomedes, Artemidorus, Amyntas, Hermaios and Callioppi.

81. Altekar, A. S.

Some rare and interesting Indo-Bactrian coins.

JNSI, Vol 9, Pt. I, 1947, pp 16-23, i pl.

Describes eight rare coins of Epander, Plato, Archebios, Strato I, Euthydemus II, Philoxenus.

82. unningham, A.

Coins of Alexander's successors in the East. the Greeks, and Indo-Scythians, Pt. I, London, 1869. 274, 29, 12p., illus. 21 cms.

The Greeks of Bactriana, Ariana and India have been dealt with.

83. Cunningham, A.

Later Indo-Scythians.

Varanasi. Indological Book House, 1962, 125p, 10 pls. 22cms.

This book contains chapters on 'Scytho-Sassanians Little Kushans, White Huns, and valuable numismatic material concerning them.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

84. Gardner, Percy

Coins of the Greek and Scythic kings of Bactria and India in the British Museum. London, British Museum, 1886, lxxvi, 193 p. 32 pls. 22 cms.

'The present volume contains all the coins which were issued by the Greek and Scythic kings who ruled in India and the neighbouring lands between the time of Alexander the great and the third century A. D."

85. Jenkins, G. K. and Narain, A. K.

Coin types of the Saka-Pahlava kings of India. Varanasi, NSI, 1957, ii, 47 p. 25 cms (Num. Notes and Monographs No. 4).

"Lists the coin types of all the kings and the Satraps of the Saka and Pahlava dynasties in India who ruled from the Ist century B. C. to 4th century A. D. 2."

86. Jenkins, G. K.

Greek and Graeco-Indian coins from the Haughton collection.

Brit. Mus. Quart Vol. 21. 1957-59. pp. 70-73. I pl.

Describes inter alia two gold coins of Seleucids and one of the Kushans and silver coins of the Bactrian kings belonging to Haughton collection in the British Museum.

87. Jenkins, G. K.

Indo Scythic mints.

JNSI, Vol. 17, Pt. 2, 1955. pp 1-26.

Suggests three main mints one each at Arachosia, Pushkalavati and Taxila.

88. Lahiri, A. N.

Corpus of Indo-Greek coins.

Calcutta, Poddar Publication, 1965. xviii. 287p, 34pls. 23cms.

This exhaustive study of the Indo-Greek coinage has

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

three parts: Pt. I—introduces various aspects of the coinage, the second part catalogues almost all known coins, typologically arranged under different rulers. The third part is devoted to types, monograms, titles and epithets and the problem of the attribution of coins.

89. Narain, A. K.

Appollodotus and his coins.

JNSI, Vol. 19, pt. 2, 1957, pp. 121-134, 4 illus.

Examines the theory of the existence of two kings of the name of Appollodotus, and concludes that only one king of this name existed and he was one of the later kings of the Indo-Greeks.

90. Narain, A. K.

Coin types of the Indo-Greek kings.

Bombay, Numis. Soc. of India, 1965, 37 p., 25 cms (Num. Notes and Monographs No. I)

"This small monograph lists the coin types of the Indo-Greek kings of Afghanistan and India."

91. Narain, A. K.

Remarkable discovery of some Indo-Greek victory medallions.

JNSI, Vol. 15, pt. 2, 1953, p. 213., 1 pl.

Describes two silver coins of unusual size of Amyntas Nikator.

92. Narain, A. K.

Some rare coins of the Indo-Bactrians.

JNSI, Vol. II, Pt. II, 1949, pp. 100-103, 3 illus.

Describes a Teradrachm of Demetrius I, Hemidrachm of Heliokles and a Didrachm of Diomides.

93. Simonetta,

An essay on the so-called "Indo Greek coinage,"

"East and West" Vol. 8, No. I, 1957, pp. 44-46, 3 pls.

On the coinage of the Greek, Saka and Parthian rulers of East Iran and North West India, Analyses the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

evidence of monographs to reconstruct the chronologic sequence of the kings and the identification of various mints.

94. Trivedi, H. V.

Some interesting Indo-Bactrian coins.

JNSI, Vol. 13, 1951, pp. 78-91, 1 pl. and pp. 215-218, 1 pl.

"Describes some important and rare coins from Shri N. R. Advane's collection.

95. Whitehead, R. B.

Catalogue of coins in the Punjab Museum, Lahore, Vol. I, Oxford Clarendon Press, 1914, xii, 217p, 20pls. 24 cms.

This standard work covers the coinage of the Greek kings of Bactria and India, the Indo-Scythic and Indo-Parthian dynasties, and the Great Kushans up to Vasu Deva.

96. Whitehead, R. B.

Commentary on rare and unique coins.

In Taxila by Sir John Marshall. Cambridge, the Uni. Press, 1951, Vol. 2 pp, 830-842.

"This commentary is mainly concerned with the cross-section of Taxila called Sirkap".

The commentary is preceded by description of rare and unique coins other than punch-marked, found at Taxila between 1912 and 1934 at pp. 795-829.

The Kushanas

97. Altekar, A. S.

Buxar hoard of Kushana coins.

JNSI, Vol. 12, Pt. I, 1950, pp. 121-123.

On a hoard of 402 copper coins which contains the various types of coins of (i) Vima Kadphises, (2) Kanishka, (3) Huvishka, and (4) Ayodhya coins of the Bull and Cock series of Satyamitra. On the basis of his

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

examination of this hoard, the author feels that the Kushans conquered Magadh early in their dynastic history.

98. Banerji, A.

Kushans in Eastern India.

JNSI, Vol. 13, 1951, pp. 107-109.

Suggests on the basis of numismatic evidence that parts of Orissa were included in the dominion of Kanishka.

99. Bivar, A. D. H.

Kushano-Sassanian coin series.

JNSI, Vol. 18, Pt. I, 1956, pp. 13-42, 5 pts.

"The purpose of this article is to arrange the several series of Kushano-Sassanian coins in chronological order on the basis of internal evidence",

100. Gobl, Robert.

4786

Roman patterns for Kushana coins.

JNSI, Vol. 28, Pts. 1 2, 1960, pp. 75-96, 41 illus.

Examines the Roman influences on Kushana coins.

101. Gupta, P. L.

Date of Kushana currency in the Eastern India.

JNSI, Vol. 15, Pt. 2. 1953, pp. 185-192.

Examines the theories of Dr. Altekar and Shri [illegible]. C. Banerji on the subject and suggests that Kushana coins might have come into currency in the Eastern U. P., Behar and Orissa in the later part of the 2nd century A. D.

102. Mac Dowall, D. W.

Weight standards of the gold and copper coinage of the Kushana dynasty from Vima Kadphises to Vasudeva.

JNSI, Vol, 22, Pts. 1-2, 1960, pp. 63-74, 4tab.

On changes in the weight standard of coins and their importance in assigning chronological sequence to distinct issues.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

103. Maity, S. K.

Metrological study of the gold coins of early India.

JNSI, Vol. 23, 1961, pp. 259-266.

Gives a metrological analysis of 435 gold coins of the Kushanas, the Kushana chiefs, the Sassanians and the Imperial Guptas in chronological order.

104. Narain, A. K.

"A unique gold and two silver coins of Huvishka.

JNSI, Vol. 22, Pts. 1-2, 1960, pp. 97-101, 1 pl.

"A unique gold and two silver coins of Huvishka from the Munich and Berlin museums respectively".

105. Rao, Uttam Singh.

Kushana Copper coins.

JNSI, Vol. 26, Pt. I, 1964, pp. 99-100.

Describes some copper coins found in a hoard in the Patiala Distt. of Panjab.

106. Wood III, Allen, H.

Gold coin-types of the Great Kushanas.

Varanasi, Num. Soc. of India, 59, 39p, 4 pls. 30cms. (Numismatic notes and Monographs, No. 9).

The gold coin types of the Great Kushana kings of Northwest India are listed in this useful monograph.

The Nagas.

107. Mankad, B. L.

Three interesting Naga coins in the Baroda Museum.

JNSI, Vol. 22, Pts, 1-2, 1960, pp. 259-260.

108. Trivedi, H. V.

Catalogue of the coins of the Naga kings of Padmavati. Bhopal, Deptt. of Archaeology, 1957, xi, 58, 2p., 10 pls. I map.

A useful treatise on the subject.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Saka Satraps of Western India

109. Banerjee, J. N.

Reading of dates on some Western Kshtrapa coins.
JNSI, Vol. 10, 1948, pp. 132-133.

110. Gupta, P. L.

A list of the hoards of silver coins of the western Kshatrapas.

JNSI, Vol. 18, Pt. 2, 1966, pp. 220-221.

111. Pandya, A. V.

Kshatrapa coins from virol-sojitra, Gujarat. J. Guj. Res. Soc. vol. 23, No, 4/92, 1961, pp. 279-282, 1 pl,

Describes 53 Kshatrapa silver coins.

112. Trivedi, H, V.

Notes on some Western Kshatrapa coins.

JNSI, Vol. 17, Pt. I, 1955, pp. 89-98, 16 illus.

113. Trivedi, H, V.

Some new light on the history of the Western Kshatrapas.
JNSI, Vol. 15, Pt, 2, 1953, pp. 159-162.

The chronology of Western Kshatrapas has been discussed with the help of numismatic evidence.

The Guptas.

114. Agrawala, V. S.

An explanation of the Chakravikrama type coin of Chandragupta II.

JNSI, Vol. 16, Pt. I, 1954, pp. 97-101, 2 illus.

Explains the motif portrayed on a Gupta gold coin found at Bayana.

115. Allan, John.

Catalogue of the coins of the Gupta dynasties and of Sasanka king Gauga. London, Trustees of the British Museum, 1914 CXXVIII, 184p., 24pls. 21cms.

This catalogue of Indian coins in the British Museum describing the coins of the Gupta dynasties is eminently

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

useful to the specialists and non-specialists. It has thrown new light on the subject.

116. Altekar, A. S.

Asvamedha coins of Samudragupta..

Bharata Itihasa Samsodhaka Mandala, Traimasika, Poona, Vol. 29 Nos. 3-4, 1948, pp. 1-7, I pl.

Studies iconographical details on the coins and discusses their legends.

117. Altekar, A. S.

Catalogue of the Gupta gold coins in the Bayana hoard. Bombay, Num. Soc. of India, 1954, 34, clviii, 363 p. 48, pls. 25cms.

A versatile reference work on the history and Gupta coinage. This biggest hoard of 1821 ancient Indian gold coins which was discovered in 1946 represents all the known types of early Gupta coinage as well as some new ones. This catalogue contains an accurate and full description of all the coins and illustrations of 449 coins. Contents: Chapter I, Discovery of the hoard; Ch. II. Importance of the discovery and earlier hoards, Ch. III, History of the Gupta dynasty Ch. IV, Coinage, and coin types, Ch V, Metrology, Ch. VI, Palaeography, Ch. VII, Symbols, Ch. VIII. Costume Furniture and weapons and Coins of the catalogue.

118. Altekar, A. S.

Coinage of the Gupta empire and its imitations. Benares, Num. Soc, of India, 1957, xvi, 390 p. 27pls. 24cms. (C. I. C. Vol. 4).

A very comprehensive and authoritative work on Gupta coinage. "Political history of the dynasty has been but briefly dealt with in the opening chapter. The second chapter gives a general survey of the Gupta coinage, discussing also its originality and artistic merit. Chapters III to X describe the coinage

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

of the great Gupta emperors from Chandragupta I to Skandagupta. Chapter XI deals with the coins of the successors of Skandagupta. Silver, Copper and Gold coated coins of the different rulers are discussed in appropriate places. Symbols, metrology, palaeography and hoards are dealt with in chapter XII".

119. Altekar, A. S.

Gupta Kalin Mudrayen.

Patna, Bihar Rashtrabhasha Parishad, 1954, 2, 3, 235 p. 27pls. 24cms.

An authoritative treatise on Gupta coins in Hindi.

120. Altekar, A. S.

King and Queen on couch type coin of Chandragupta II. JNSI, Vol. 18, pt. I, 1956, pp. 51-55. 1 illus.

Describes two gold coins of Chandragupta and explains their legends.

121. Altekar, A. S.

Rare and unique coins from the Bayana Gupta hoard. JNSI, Vol. 10, 1948. pp. 95-113, 3 pl.

Describes coins of Kachagupta, Samudragupta, Chandragupta II, Kumaraguptā I, and of the 'Apratigha' type.

122. Bajpai, K. D.

Ramgupta, a Gupta king.

JNSI, Vol. 23, 1961, pp. 340-344. 1 pl.

Describes copper coins of Ramagupta found in the Vidisa district of Madhya Pradesh.

123. Banerji, R. D.

Coinage. In age of the Imperial Guptas. Benares, Hindu Univ. 1933, pp. 209-250, illus.

Eminently readable description of the Gupta Coinage.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

124. Brown, C. J.

Catalogue of the coins of the Guptas, Maukharis, etc., in the Provincial Museum, Lucknow, Allahabad, Supdt. Govt. Press, 1920, vi, 46 p. 24 cms.

"The Lucknow collection is fairly representative as regards the gold coins of the Guptas, especially those of Samudragupta and Chandragupta, II".

125. Chatterjee, C. D.

Some unique gold and brass coins of the Imperial Guptas. J. U. P. H. S, Vol. 5, Pt. 2, N. S. 1957, pp. 43-116, 3 pls.

Classifies the various types of Gupta coinage and examines two gold coins of Samudragupta and a brass coin of Chandragupta II.

126. Chattopadhyaya, B. D.

Political significance of the altar type coins of Skandagupta. JNSI, Vol. 27, p. I, 1965, pp. 36-40.

Maintains that 'fire-altar' device was adopted from the Sassanian coins.

127. Chhabra, B. Ch.

Coin legends of Gupta emperors and Vishnusahasranama. JNSI, Vol. 9. 1947, pp. 137-145.

The author shows that names of Vishnu occuring in Vishnusahasranama stotra have been used as appelations in coin legends of Gupta emperors.

128. Gupta, P. L.

An unexplained archer type coin of Samudragupta. JNSI, Vol. 16, Pt. I, 1954, pp. 102-104, 1 illus.

On the basis of the peculiarities, the author suggests that there might be another Samudragupta in the Gupta dynasty belonging to the post-Skandagupta period.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

129. Gupta, P. L.

Coins of Ramagupta.

JNSI Vol. 12, 1950, pp. 103-111, with notes by A. S. Altekar and A. K Narain.

Proves with numismatic evidence the existence of Ramagupta brother of Chandragupta II.

130. Gupta, P. L.

The gold coins of Kumaragupta II and III.

JNSI, Vol. 12, 1950, pp. 31-33.

Suggests by numismatic evidence the existence of two Kumaraguptas after the death of Skandagupta.

131. Gupta, P. L.

Kumarkhan hoard of Gupta gold coins.

JNSI, Vol. 22, Pts, 1-2, 1960. (Prof. A. S. Altekar commemoration volume) pp. 265-266.

Maintains that this hoard of 9 gold coins also includes one coin of Kumaragupta I which was not earlier noticed by C. R. Singhal.

132. Gupta, P. L.

Metrology of the gold coins of the Gupta dynasty.

JNSI, Vol. 14, 1952, pp. 118-121.

Analyses the economic conditions which brought about changes in weight of the gold coins of the Imperial Guptas.

133. Jai Prakash.

Observations on the Mrigaya coin types of the Guptas.
JNSI, Vol. 24, Pt. 2, 1962, pp. 152 163.

The Mrigaya (hunting) types represent skill in hunting of the Guptas.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

134. Jai Prakash.

On the Ramagupta of coins,

JNSI, Vol. 25, pt. 2, 1963, pp. 165-171.

Discusses the various theories based on numismatic evidence regarding Ramagupta and concludes that he "was in all probability an independent king of eastern Malwa and a contemporary of Chandragupta I".

135. Mookerji, R. K.

Some aspects of Gupta coinage.

JNSI, Vol. 5, 1943, pp. 151-152.

Explains the reasons for a large variety and the design behind it in Gupta coinage.

136. Mookerji, R. K.

Some considerations on Gupta coinage.

Law, Vol. I, 1954, pp. 164-169.

Traces the working of designs of historical and territorial significance in the fashioning of many a type of Gupta coinage.

137. Narain, A. K.

Budhagupta and his gold coins.

JNSI, Vol. 12, 1950, pp. 112-115.

Describes two coins of Budhagupta to prove that he did strike coins in gold. It is held by a few scholars that he did not issue any gold coins.

138. Sharma, Dasharatha.

Significance of Chandragupta's title Cakravikrama.

J. G. Jha Res. Inst., Vol. 7, 1949-50, pp. 311-312.

Explains the legend of the coin and suggests that the coin proclaims universal sovereignty of Chandragupta II.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

139. Shukla, S. M.

Some interesting sub-varieties of the Gupta coins.

JNSI, Vol. 22, Pts. 1-2, 1960, (Prof. A. S. Altekar Commemoration Vol.) pp. 188-192, 1, pl.

Describes 'Standard type coins of Samudragupta. Archer type coins of Chandragupta II and Bull type silver coins of Skandagupta in his coin cabinet.

140. Singhal, C. R.

Hoard of Gupta gold coins found in Gujarat.

JNSI, Vol. 15, pt. 2, 1953, pp. 195-196.

Describes 9 gold coins found at Kumarkhan.

141. Sitholey, B. S.

Art of Gupta coins.

JNSI, Vol. 10, 1948, pp. 119-131, 12 figs.

Discusses the various aspects of Gupta coinage.

142. Sivaramamurti, C.

Chakravikrama type.

JNSI, Vol. 13, pt. 2, 1951, pp. 180-182, 1 fig.

"Suggests that the two-armed figure inside the wheel represents the Chakra-purusha of Vishnu who is bestowing on Chandragupta Vikramaditya the three symbols of royal power namely the kingly virtues of authority, energy and counsel".

143. Smith, V. A.

Classified and detailed catalogue of the gold coins of the Imperial Gupta dynasty of Northern India with an introductory essay, 88p. 3 pls. 22cms.

A useful work on the subject.

144. Sohoni, S. V.

Chandragupta I-Kumaradevi coin type : a reexamination.

JNSI. Vol. 19, Pt.2, 1967, pp. 145-154, 3 figs.

Maintains that this type of coin was not issued by Chandragupta I but by Samudragupta.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

145. Thakur, U.

Study in the copper coins of Ramagupta.
JNSI. Vol. 26, Pt. 2, 1964, pp. 162-170.

Suggests that it would be nearer the truth to place Ramagupta of these coins as a local ruler of Malwa.

146. Upasak, C. S.

Some salient features of Brahmi on Gupta coins.
JNSI, Vol. 23, 1961, (Golden Jubilee Vol.) pp. 216-240.

147. Vidya Prakash.

Some aspects of material life on Gupta Coins.
JNSI, Vol, 23, 1961; (Golden Jubilee Vol.) pp. 267-296, 102 figs.

Describes aspects like (1) Royal amusements (2) Furnitures and other household materials and (3) Weapons of war.

The Huns.

148. Choudhary, R. K.

Critical study of the coinage of the Huns.
JNSI, Vol. 25, Pt. 2, 1963, pp. 172-178.

"Their coinage shows influence of the Sassanians, the Kidara Kushanas, the Western Kshatrapas, the Guptas, Maukharis. Silver and copper were used by them".

149. Narain, A. K.

Coins of Toramana and Mihirakula.
JNSI, Vol. 24, Pt. I, 1962, pp. 41-44, I, pl.

Describes 9 copper coins.

Harsha Vardhana

150. Bajpai, K. D.

Unique gold coin of Harsha.
JNSI, Vol. 27, Pt. 1, 1955, pp. 103-106, 1 pl.

Describes one gold coin of Harsha, the first gold coin so far known,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Medieval Hindu India

(a) General.

151. Cunningham, A.

Coins of the medieval India from the seventh century down to the Mohammedan conquests.

London, Quaritch, 1894, vi. 108p. 11., pls. 22cms.

Covers the coins of (i) Western Satraps of Malwa and Gujarat (2) Guptas of Magadha (3) Kashmir (4) Rajputana and N. W. India (5) Gandhra and Punjab (6) W. and E. Chedi (7) Delhi and Kanauj (8) Narwar and Mewar (9) Kangra or Trigarta.

152. Lallanji, Gopal.

Coins in the epigraphic and literary records of Northern India in the early medieval period.

JNSI, Vol. 25, Pt. I, 1963, pp. 1-16.

Draws attention to the types of coins mentioned in the epigraphic and literary records like Dvyasrayakavya and Prabandhachintamani.

153. Lallanji, Gopal.

Medium of exchange in early medieval India.
JNSI, Vol. 25, Pt. 2, 1963, pp. 154-164.

Gives a general survey beginning with cowries.

154. Lallanji, Gopal.

Weight standard of the coins of medieval India.
JNSI, Vol. 25, Pt. 2, 1963, pp. 145 153.

Discusses the weight standard of early medieval coins.

(b) Rajput.

155. Joshi, M. C.

Some observations on the Jhansi hoard of Rajput coins.
JNSI, Vol. 27. Pt. I, 1965, pp. 41-45, 2, pls.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Describes a hoard of 318 silver coins found at Dariyapura, a suburb of Jhansi city. Of these, 5 coins belong to king Madanavarman of the Chandella dynasty and the remaining ones to Mahipaladeva identified by the author as a local Central Indian chief of Northern Bundelakhand.

156. Sharma, Dasharatha.

Chandella coins described in Pehru's Dravya-pariksha.

JNSI, Vol. 25, Pt 2, 1963, pp. 247-248.

Thakkura Pehru was the mint-master of the Khilji Sultans. His work gives useful information about Chandella Coinage.

(c) Kashmir.

157. Aggrawal, V. S.

A hoard of Kashmir coins.

JNSI, Vol. 11, Pt. I, 1949, pp. 65-69, 2 pls.

Describes a hoard of 186 copper coins of the medieval kings of Kashmir beginning with Kshemgupta (950-958 A. D.) and ending with Rajadeva (1213-1235 A. D.)

158. Ray, S. C.

Note on the copper coins of the Karkota kings of Kashmira.

PIHC, Vol. 14, 1951, pp. 76-78.

Kingdoms of Deccan

(a) Satavahanas.

159. Gupta, P. L.

Satavahana coins from Brahmapuri (Kolhapur).

Bul. P. W. M. No. 5, 1955-1957, pp. 62-73.

A hoard of lead and copper coins was found near Brahmapuri Hill. It contains coins of the Kuru Kings. On the basis of numismatic evidence, the author suggests that the Kurus preceded the Satavahanas.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

160. Mirashi, V. V.

New hoard of Satavahana coins from Tarhala (Akola District Berar).

JNSI, Vol. 2, 1940, pp. 83-94, 1-pl.

Describes a hoard of 1600 potin coins belonging to Satavahana kings Sri-Satakarni (III) through Sri Pulahamavi.

161. Mnkherjee, B. N.

Satavahana coinage.

I. H. Q., Vol. 34, No. I, 1958, pp. 57-65.

Examines Rapson's theory that S. coins have local, dynastic and personal characteristics and suggests certain modifications in the light of new evidence.

162. Rao, M. Rama.

Select Satavahana coins in the Govt. Museum, Madras.

Madras, Controller of S. and P. 59, 27p. 2. pls. 28cms.

A catalogue of 223 lead and potin coins ascribable to Gautamiputra Satakarni, Vasisthiputra Pulumavi, Satakarni (iv), Sivasri Candra Satakarni I, Skanda Satakarni I, Sriyajna Satakarni, Karna Satakarni I and Saka Sada 2.

163. Rao, M. Rama.

Some important Sātavahana coins.

JNSI, Vol. 18, Pt. I, 1956. pp. 43-45.

Describes 15 lead coins of four varieties of the chaitya type.

164. Rao, R. S.

Andhra coins.

Qr. J. AHRS, Vol. 5, Pt. I, 1930, pp. 57-64, 1 pl.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A general essay with the description of a few lead coins of the later Andhra King Sri Vasi.

165. Rapson, E.J.

Catalogue of the coins of the Andhra dynasty, the Western Ksatrapas, the Traikutaka dynasty and the "Bodri" dynasty. London, Trustees of the British Museum, 1908. CCVIII, 268 p. 21 pls., 1 map, 22 cms.

This catalogue of Indian coins in the British Museum is an excellent reference resource in the coins of the dynasties mentioned in the title.

166. Sohoni, S.V.

Reference to Satavahana coinage in Gatha Saptasati, J.B.R.S., Vol. 41, 1955, pp. 329-331.

"The Gatha Saptasati is the most ancient collection of verses in Maharashtri Prakrit".

(b) Ikshvakus.

167. Subrahmanyam, R.

Catalogue of the Ikshvaku coins in the Andhra Pradesh Govt. Museum.

Hyderabad, Govt. of A.P., 1962, vi, 49 p. 15, pls. Coinage of Iksvaku dynasty based on the Ongo hoard forms the subject matter of this monograph.

(c) Kalachuris.

168. Mirashi, V.V.

Coins of the Kalachuris.

J.N.S.I., Vol 3., Pt. I., 1941, pp. 21-39, 1 pl.

Describes coins of Krishnaraja, Gangeyadeva. Kalachuris of Mahakosala, Jajalladeva I, Ratnadeva II, Prithvideva II, and Pratapamalla.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

(d) Vishnukundins.

169. Rao, M. Rama

Vishnukundin coins in the Andhra Pradesh Govt. Museum, Hyderabad, Govt. of Andhra Pradesh, 1963, 42 p., 6 pls., 28 cms.

A descriptive catalogue of select coins. Also contains a review of the history and monuments of the Vishnukundins who ruled over part of coastal Andhradesa from 220 A.D. to 624 A.D.

(e) Chalukyas.

170. Rao, M. Rama

Eastern Chalukyan coins in the Andhra Pradesh Govt. Museum, Hyderabad, Govt. of Andhra Pradesh, 1963, iv, 14 p., 6 pls., 28 cms.

A useful catalogue of select Eastern Chalukyan copper coins assignable to Vishnuvardhana I and II.

171. Shah, U.P.

Coinage of early Chalukyas of Anahillavada-Patan.

J.N.S.I., Vol. 16, Pt. 2, 1954, pp. 239-242.

Examines literary and inscriptional evidence regarding coins of early Chalukyas of Patan who had their own coinage from the very beginning.

(f) Yadavas.

172. Ayyangar, S.R.

Padamatankas of some of the Yadava kings of Devagiri.
J.P.A.S.B., N.S. Vol. 21, No. 6, 1925.

Numismatic Suppl. No. 39 for 1925 pp. N 6-N 10.

On gold coins found at Rachapatnam Village in Kistna Distt.

(g) Kakatiyas.

173. Gopalachari, S.T.S.

Kakatiya Coins.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

J.A.H.R.S., Vol. 6, Pts. 3-4, 1932, pp. 142-144.

Examines the material on the subject and suggests that reliable specimens of Kakatiya coinage have not been found.

174. Ramayya, S.

Real Kakatiya coin.

J N.S.I., Vol. 21, Pt. 2, 1959, pp. 181-184, 3 illus.

Describes a Kakatiya copper coin.

Kingdoms of South

(a) General.

175. Desikachari, T.

South Indian coins.

Trichinopoly, St. Joseph's Ind. School Press, 1933, iv, 205, p 6 pls, 21 cms.

This reprint contains papers, articles and notes on. South Indian coins contributed by the author from time to time.

176. Elliot, Sir Walter

Coins of Southern India.

London, Trubner & Co., 1880, xi, 159 p., illus. 30 cms. (Ints. Numismata Orientalia).

A pioneer work on the dynastic coinages of the principal Southern rulers.

177. Gupta, P.L.

Survey of Indian Numismatography (South Indian Coinage).

J.N.S.I , Vol. 23, 1961, pp. 74-77.

X brief but useful survey.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

178. Krishnan, K.G.

Literary and epigraphical references to the coinage in the ancient Tamilnad.

J.N.S.I., Vol. 20, Pt. I, 1958, pp. 9-14.

Presents results of a study of coinage made from Tamil inscriptions of the early medieval period and provides useful information on South Indian Coinage.

179. Mohandas, P.N.

Three unique South Indian Copper Coins.

J.N.S.I., Vol. 26, Pt. I, 1964. pp. 64-68, 1 pl.

Describes three coins with unique and interesting iconographic motifs on them, namely Nataraja, Seshasayi and Vaikuntha.

180. Tarapore, P.S:

Some rare South Indian Coins.

J.N.S.I., Vol. 4, 1942, p. 150, 3 illus.

Describes three rare coins,

(b) Pallavas

181. Krishna, C.

Discovery of a Pallava coin (P) at Nagar, District Bhandara, Maharashtra.

J.N.S.I., Vol. 26, Pt. 2, 1964. pp. 240-243.

Describes a circular alloyed copper coin and ascribes it to Pallavas.

(c) Cholas.

182. Sastri, K.A.N.

Coins, weights and measures.

In Colas by K.A.N. Sastri.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Madras, the University, 1937. Vol 2, Pt I. pp. 443-465. 2 pls.

A concise account of coins, weights and measures of the Cholas.

(d) Pandyas.

183. Biddulph, C. H.

Coins of the Pandyas.
Varanasi, The Numismatic Society of India, 1966.
71 p., 6 pls., 24 cms. (Num. Notes and Monographs No. 11

(e) Kadambas.

184. Dikshit, M G.

Some gold coins of the Kadamba dynasty.

J.N.S.I., Vol. II, 1949, pp. 88-92. 6 figs.

(f) Vijayanagar.

185. Heras, H.S.J.

Coins of emperor Mallikarjuna of Vijayanagara.

J.P.A.S.B. Vol. 29, No, 3, 1933.

Numismatic Suppl. No. 44 for 1931-33, pp. N 17-N 22.

Suggests that Gajapati or Anegondi coins found in Karnataka should be attributed to Emperor Mallikarjuna and not to the Cera Kings of Kongudesa as has been done by Elliot & Rapson.

186. Panchmukhi, R.S.

Coinage of the Vijayanagara dynasties.

Vijayanagara Sexc. Comm. Vol., Dharwar, 1936. pp. 101-118. 2 pls.

Contents :

1. Historical Introduction.
2. Coinage before the Vijayanagara period.
3. Innovations introduced by the Vijayanagara power.
4. Types and symbols.
5. Legends.
6. Weights and metals.
7. Denominations of coins.
8. Mints.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Technique of Casting Coins

187. Sahani, Birbal

The Technique of casting coins in ancient India.
Bombay, Num. Soc. of India, 1945.
68 p., 7 pls., 37 cms. (Memoirs of the Num. Soc. of India, No. 1).

Examines coin moulds found in various places, e.g., Rohtak, Suret, Nalanda, Taksala, Mathura, and other ancient sites and the methods and techniques of casting coins in ancient India ; then compares them with the techniques adopted in ancient Rome and China. Indeed an important treatise on the subject.

Addenda.

188. Circar, D.C.

Studies in Indian Coins.
Delhi, Motilal Banarsidass, 1968.
xii, 405 p., 26 pls. 22 cms.

An authoritative and authentic resource book. It consists of the learned papers of the author on numismatics which were published in different periodicals.

189. Lallanji Gopal.

Early medieval coin-types of Northern India.
Varanasi, Num. Soc. of India, 1966.
v, 81 p., 12, pls , 25 cms.

"In the first part we analyse the different coin-types, their origin, authorship and historical implications..... .....In the second part we have arranged the coin-types under the name of the issuing dynasties, for the obvious reason that it may be more useful to the students".

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

190. Mehta Vasishtha, Dev Mohan.

The Indo-Greek Coins.
Ludhiana, Indological Res. Inst., 1967.
xvi, 196 p., 7 pls. 21 cms.

This handy volume contains useful material on Indo-Greek Coins.

191. Rameson, N.

A Catalogue of the Vijayanagar Coins of the Andhra Pradesh Govt. Museum.
Hyderabad, Dir. of Archaeology ; A.P.G., 1962.
iii, 156 p., 21 pls., 28 cms.

192. Rao, M. Rama.

Satavahana coins in the Andhra Pradesh Govt. Museum.
Hyderabad, Dir. of Archaeology, A.P.G., 1961.
iii, 69 p., 20 pls., 24 cms.

A descriptive catalogue of 421 Satavahana Coins kept in the Govt. Museum, Hyderabad.

193. Satya Prakash and Rajendra Singh.

Coinage in ancient India ; a numismatic, archaeochemical and metallurgical study of ancient Indian coins.
New Delhi, The Research Institute of Ancient Scientific Studies, 1968.
xxii, 546 p. 14 pls. 23 cms.

This authoritative and authentic monograph contains valuable information on the chemical composition of coinage in ancient India.

194. Trivedi, H.V.

Western Kshatrapa coins in the Andhra Pradesh Govt. Museum, Hyderabad.
Hyderabad, Dir. of Archaeology, A.P.G., 1964.
ix, 51 p., 59 illus., 28 cm.

Describes silver type coins found in a village of Guntur Distt., of A.P.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ANCIENT COINAGE OF INDIA—A SURVEY

By

Bal Krishan & G.D. Khullar

Coins are tokens of a purchase value issued on a general understanding of their purchasing power. They are very important as a source of history and provide a running commentary upon the economic. social and political life of the people. The symbols, legends and figures portrayed on Indian coins are very meaningful. They symbolise or signify some important aspect of the ruler, such as his personal charm from coins bearing the portrait ; his status as revealed by the chhatra or parasol held over his head ; his achievements and accomplishments in the field of arts, literature and the royal sports ; his prowess as the unrivalled bowman or the slayer of a tiger, lion or rhinoceros ; his fame that transcends all measures ; his conquests as the royal horse-sacrificer ; his faith as seen from the deities depicted on the coins ; his wealth and splendour ; his generosity ; his ideal and his submision to the Almighty.

Before the dawn of civilization, the primitive folk carried on their trade by barter or exchange in kind. The agricultural society computed its wealth in terms of cattle, like the cow, the ox or the horse, which were the higher units of barter. The smaller units of exchange were cowrie-shells, beads, knives, etc. etc. The inconveniences caused by the barter system were realised by the community at large and gradually a more practical media of exchange was evolved which was mutually acceptable to all. With the discovery of metals like copper, iron and silver etc., the medium of exchange became more convenient in terms of metal bars, which also began to be stored as wealth. Gradually, these metal bars were cut to pieces of recognised weight

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

and fineness and regularised by the stamp of authority and thus coinage was evolved. When exactly the earliest coinage in India originated, is still shrouded in mystery.

Though a highly developed urban civilization flourished in the ancient cities of Mohenjodaro and Harappa from C. 2500 to 1500 B.C. which spread over a vast area along the western coast, there is no definite evidence of coinage. It is difficult to believe how the people of Harappan culture with such an advanced sense of town-planning and fortifications and developed arts and crafts could carry on smooth trade or business transactions with Mesopotamia in the absence of coins. The Vedic literature refers to '*nishka*' and '*śatamana*' which were offered as gifts to the Brahmanas and the king. The epics *Ramayana* and *Mahabharata*, the Buddhist and Jain literature, Kautilya's *Arthaśastra* and Panini's *Ashtadhyayi* provide several references to the developed currency of India. We come across such names of coins as *nishka*, *suvarna*, *satamana*, *sama*, *prați*, *purana*, *rupaka*, *dharna*, *pana*, etc.

The earliest money coined in India is known as 'punch-marked coins' or the *puranas*', which were in circulation in north India from about the 6th century B.C. to the 1st century B.C, and in south India for about three centuries later. These coins derive their name from the method of manufacture peculiar to them. The symbols or marks on these coins were not die-struck, but impressed by way of punching. They are usually in silver and sometimes in copper, being rectangular, oblong or circular in shape. Probably the minting rights of these punch-marked coins were vested in the king, and the goldsmiths or commercial guilds (*śrenis*). They are flat pieces cut from a hammered sheet of metal and clipped to the proper weight. These coins do not bear any inscriptions giving the date or the name of the kings, but a variety of symbols are impressed on them by means of separate punches on one side, which show the solar ring, the moon, the elephant, cow, chariot, horse, bull, stream, hill, tree in railing, tiger or lion, birds, *dharmachakra*, etc. On the other side of these coins are punched only a few symbols. The punch-marked coins are of indigenous origin, uninfluenced by any foreign coinage. Perhaps, they originated in some North Indian

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

territory.

There were also early die-struck and cast coins in circulation in India for some centuries before the Christian era, but in all these cases the authority that issued these has remained a matter of speculation. After the break up of the Mauryan empire in the 2nd century B.C., a number of small independent kingdoms came into existence and they issued several local or tribal varieties in silver or copper like those issued from Mathura, Ayodhya. Kausambi, Ujjain, Taxila, Ahichchhatra, etc., representing several clans like Kunindas, .Arjunayanas, Audumbaras, Panchalas, Yaudheyas, and so forth. Most of these tribal coins bear the legend in the Brahmi script giving the name of the ruler or the tribe under whose authority they were issued.

After the invasion and retreat of Alexander from Punjab in 326 B.C., Seleukos, one of his generals, established a Greek kingdom in Syria and Bactria, which was situated on the north of Hindukush, became an independent kingdom under Euthydemus, son-in-law of Diodotus I and the Bactrian Greeks came to India first under Demetrius, son of Euthydemus. The Indo-Greek family had two rival branches-one ruling in Bactria undar Eucratides and his successors Helicoles, Antialcides and Hermias ; and the other ruling in the Punjab under Demetrius including Apollodotus I. Menander. Strato I and Zoilus. The rule of the Indo-Greeks lasted from C. 189 to 30 B.C. The Indo-Greek rulers issued several types of silver and copper coins bearing legends in Greek on one side, and in Kharoshthi on the other. The impact of their coins made itself felt in the fabric and design of the Indian coinage, which adopted their fashion of showing the bust or head of the ruler on the coins. The gods and goddesses commonly portrayed on the Indo-Greek coins are Zeus, Haracles, Apollo and Pallas Athene. The Indo-Scythian kings of Bactria like Maues, Azes I and Azilises and the famous Indo-Parthian king like Gondophares issued several varieties of silver and copper coins, closely following the Indo-Greeks. Some of these coins are remarkable for the realistic and boldly drawn portraits of kings. The coins bear the title in Greek 'Basileus Basileon' or 'King of Kings'. The legends on Saka coins are in Greek on the obverse and in Kharoshthi on the reverse. Coins

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
are the most important documents and the resource material for the reconstruction of history of the early Indo-Greek, Indo-Scythian and Indo-Parthian dynasties.

The Kushans, who belonged to the foreign Yueh-chi tribe, grabbed power from the Sakas of Bactria in the first century B.C., and under their kings Kujula Kadphises and Vima Kadphises extended their empire to Gandhara and Western Punjab areas. The greatest ruler of the dynasty Kanishka conquered vast territories of northern India, and his important successors were Huvishka and Vasudeva. The Kushans for the first time issued a very large number of gold coins, besides their copper coinage. They borrowed certain motifs from the earlier currencies, but at the same time introduced new changes which in turn influenced the later Hindu coinage. On the obverse of the Kushan coins is generally found the portrait of the king and on the reverse are portrayed Indian, Petsian or Greek gods and goddesses with the legend in Greek characters, which were meant to propagate the spirit of mutual understanding and tolerance among the vast Hindu, Greek and Persian subjects of the Kushan empire. Kanishka introduced the Iranian title "Shaonana Shao". "King of Kings", on his coins, On the reverse of Vasudeva's gold coins is found Siva accompanied by his bull. Though the earlier Kushan coins were influenced by the Roman coinage due to their diplomatic and trade relations with the Roman world, the later ones are more Indian in feeling. This is borne out by the cult of Siva as shown in the coins of Vima Kadphises and Vasudeva, in the Buddha coins of Kadphises and Kanishka and in the typical Indian cross-legged position in which Vima Kadphises and Huvishka are shown seated on their coins. The Kidara-Kushans in the fifth century struck coins in base gold and copper of the standing-king and seated-goddess type.

Due to a series of foreign invasions, the coinage of northern India had been often modified by foreign influences, but the southern coinage, barring a few exceptions, had been developed on indigenous lines. After the death of Asoka in 232 B.C., the Satavahanas became independent and they ruled over vast dominions comprising the Narmada and Godavari river areas and the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
Western Ghats for nearly four centuries. The Satavahana coins issued round about the Christian era are peculiar in this that they are extensively in lead, though copper and potin coins were also struck. Most of the Satavahana coins have Brahmi legends on both sides, and portray the figure of an elephant, horse, lion or *chaitya* on the obverse and the Ujjaini symbol 'a cross with four circles' at the end of the two crossing lines, on the reverse The coin with a ship having two masts on the obverse of an issue in lead of Vasishtiputra Sri Pulumavi is interesting, as also the portrait bearing coins of Gautamiputra Satakarni and Sri Yajna Satakarni. Though not very artistic or beautiful, the Satavahana coins are an important source material for reconstructing the dynastic history.

The Western Satraps originated from the Sakas of Bactria and ruled over Malwa, Gujarat and Kathiawad. Nahapana and Chashtana were great conquerors and belonged to two different lines. The coins of these princes have Greek characters on the obverse and Brahmi and Kharosthi inscriptions on the reverse. The Western Satrap coins in silver have elaborate legends and portrait heads of the kings on one side and the Buddhist *chaitya* or *stupa* on the other, borrowed from the Satavahana coinage. These coins are of great historical importance as they bear dates in the Saka era, which started from 78 A.D. These dates are helpful in reconstructing the history of the Western Satrapas to the closing years of the 4th century A.D., when they were conquered by Chandragupta II of the Gupta dynasty.

The golden age of the Imperial Guptas from B.C. 320 to 550 A.D. marks an epoch of all round progress in arts, sciences and literature. The gold coins of the Guptas are the finest examples of the Indian coinage, These are as splendid in their execution as they are varied in their infinite types. Legends inscribed in classical Sanskrit appear for the first time on the Gupta coinage. The dates on these coins are of the Gupta era starting from 320 A.D. The important emperors of the Gupta dynasty were Chandragupta, I Samudragupta, Chandra gupta Vikramaditya, Kumaragupta and Skandagupta. They took delight in portraying their achievements, their valour, their

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

faith, their pastimes, etc. on their coins. On one side of the Gupta coins is shown the king standing and making oblations before an altar, playing on the lyre, performing the horse sacrifice, riding on the horse or elephant, slaying the lion or tiger or rhinoceros with a sword or bow, or sitting on a couch. On the reverse is portrayed the figure of goddess Lakshmi seated on a throne or on a lotus seat and sometimes the figure of the queen herself. These coins also bear the titles and the names of the kings. The king and queen type of Chandragupta I is important as on it is mirrored the political alliance of the Guptas and the Lichchhavi clan. Among the six types of coinage issued by Samudragupta the Standard and the Archer types were as common and popular as the tiger-slayer, the lyrist and the Asvamedha types were artistic. Eight types of gold coinage were struck during the reign of Chandragupta II. His *chakravikram* type is unique and the standard type scarce The more common coins were the Archer, horseman, *chhatra*, couch and the tiger-slayer types. Kumaragupta I issued as many as 14 types of gold coins of which the Karttikeya type, the swordsman, the elephant-rider, the rhinoceros-slayer, the elephant-rider-lion-slayer types were new innovations. His *chhatra* and *apratigha* types are very scarce. The three varieties issued by Skandagupta were the archer type, the horseman type and the king and Lakshmi type. The silver coinage of the Guptas was issued after Chandragupta II conquered the Western Satraps and carry the portrait of the king on one side and the *garuda* or the peacock on the other. The copper coinage issued by Chandragupta II has the bust or head portrait of the king on one side and the *garuda* on the other. The profuse and magnificent Gupta series of coins are an important source for the cultutal study of the Gupta times.

The western silver coinage of the Guptas was perhaps imitated by some of the powerful Maitraka rulers of Valabhi in the 6th and 7th centuries A.D. The Maukharis of Bihar also followed the peacock type of the Guptas, and they used the Gupta era on their coinage. The copper money of the Guptas was copied by the White Huna princes, Toramana and Mihiragula.

After the break-up of the Gupta empire, Vardhanas of Thanesar and Kannauj, were supreme in the whole of northern India, and king Harshavardhana was the greatest ruler of the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
dynasty, who turned out the Huna invaders. The silver coins issued by the Vardhanas have the head of the king portrayed on the obverse and the figure of a peacock on the reverse. The name 'Siladitya' is also inscribed. The dates on the Vardhana coins are reckoned in a new era which commenced with Harshavardhana's coronation in A.D. 606 In the 7th century, Śaśanka, the king of Gaud, issued gold coins portraying Siva and Nandi.

The White Hunas, under the leadership of Toramana and his successor Mihirgula, conquered northern India in the first quarter of the 6th century and established their capital at Sialkot in Punjab. After being driven out in 528 A.D., they seized the kingdom of Kashmir, where Mihirgula ruled till his death in 542 A.D. The majority of Huna coins are poor imitations of the Sassanian silver coins. The heads of Toramana and Mihiragula are crudely portaryed on the obverse, while on the reverse is the usual Sassanian fire altar and attendants. The inscriptions are generally in Nagari script.

The Hunas were instrumental in introducing Sassanian types into India. The coins of a Sassanian dynasty, which established itself in Western India, bear bilingual inscriptions in Pahlavi and Nagari, and the head of the king on the obverse and the fire-altar on the reverse. The earlier Sassanian coins are of thin flat fabric, which later on grows thicker and dumpy. The silver coins with the legend 'Srimad Adivaraha' on the reverse, and Varaha on the obverse, retain traces of a fire-altar below the inscription. These coins have been attributed to the powerful Bhojadeva of Kannauj of the Gurjara-Pratihara dynasty.

The various Rajput dynasties who ruled in northern and Central India, struck coins usually of gold, copper or billon, and very rarely silver. The Rajput coinage can be broadly categorised into two types, the one bearing the name of the king on one side and a goddess on the other, as noticed in the coins of Kalachuris of Dahala (modern Jubbulpore), the Chandelas of Bundelkhand, the Tomaras of Ajmer and Delhi and the Rathors of Kannauj. The other type was introduced by the kings of

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Ohind or Gandhara in silver, which show a seated bull on one side and a horseman on the other. The Tomaras and Chauhans of Delhi and the Rathors and the kings of Narwar copied this type on their copper or billon coins. The Maharajas of the Trigarta valley continued to strike degenerate coins of the bull and horseman type upto the 16th century. A figure of Hanuman on the obverse and a Nagari legend on the reverse is found on a few coins of the Mahakosala kings and of Jayavarma of Mahoba.

The early history of Kashmir is obscure, but from the 6th to the early 14th century, it was ruled by four successive dynasties. The earliest coins from Kashmir of the 5th century, bear the head of a king on the obverse and a vase on the reverse. The numerous coins struck by the princes of the Naga dynasty in the 8th century are base gold and poor imitations of the standing king and seated goddess type. These have the name of Kidara inscribed under the king's arm. The Varma dynasty came into power in A.D. 833, and its various kings struck coins in copper. These include the coins of two queens (980-1003) of Kashmir, Sugandha and Didda, the latter so well-known for an adventurous career. In the Kashmir series of coins, king Harshadeva (1089-1111) issued both gold and silver coins in imitation of the ornate gold of Kongudesa in southern India, with an elephant's head on the obverse. He also issued a gold coin of the usual horseman and seated goddess type.

The lack of abundance and rather poor quality of the coinage under the Rajputs during the medieval period must be attributed to the general insecurity, caused by the repeated quarrels between the numerous petty kingdoms and the impoverishment of the country at the hands of the Hunas. The supply of silver seems to have been drawn chiefly from Central Asia and the scarcity of this metal may be due to the rise of the Arab power on the one hand and the consequent disturbances in Central Asia on the other, which interrupted trade between India and the West by land and sea. Hence billon was used to manufacture coins.

The currency of the south has not received as much atten-

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
tion from scholars as the more attractive money of the north. Several difficulties come in the path of the numismatists, while studying the south Indian coinage. The legends on them are rare and the dates rarer still. The short legends give only the name of the ruler or his title. The royal emblem on them serves as the stamp of authority. Sometimes even the cognizances of the vanquished rulers are incorporated. A careful and systematic study backed by historical material is therefore needed for assigning coins to the various dynasties of the south. The metals used in south Indian coinage are almost exclusively gold and copper, with the rare use of silver. The gold coins were of two denominations known as the *hun*, *varaha* or *pagoda* and the fanams. The copper coins were called *kasu*. In the south, the Padmatanka appears to have occurred sufficiently early after the Satavahana period. These cup-shaped coins were stamped with minute punches, first on one side only, later on both obverse and reverse. These were possibly first struck by the Kadambas.

The first great dynasty of the Chalukyas was founded by Pulakesin I in the middle of the 6th century A.D. with its capital at Badami in the Bijapur district. The Chalukyan kingdom in the Deccan became more powerful and extensive under his grandson Pulakesin II (608-642). But in 753, the Chalukyas were overthrown by the Rashtrākutas. In 973, a Chalukya prince, Tailapa, restored the fortunes of his family and established the Western Chalukya kingdom with its capital at Kalyani, and this lasted till 1190 A.D., when they were overthrown by the Hoysalas. The coins of the Western Chalukya dynasty have on one side a temple or a lion and legends in old Canarese. The other side is generally blank. This type of coins were struck by the kings Jayasimha, Jagadekamalla and Trailokyamalla, etc.

The Hoysalas under Ballala II rose to power on the ruins of the Western Chalukya kingdom and their gold and copper coins bear their cognizance, the maned lion, and the legends in the Canarese script. The Kakatiyas or the Ganapati dynasty of Warangal have on their pagodas and fanams and copper coins a couchant bull on one side and an incomplete legend in Nagari on

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the other. The pagodas of the Yadavas of Devagiri bear a kneeling figure of Garuda on the obverse. The Gajapatis of Western Mysore who fled to Orissa in the 9th century when the Cholas invaded them, coined the famous elephant-pagodas. A member of the Ganga dynasty of Mysore. Anantavarman Chodaganga, who settled in Orissa, coined fanams with a recumbent bull, conch and crescent on the obverse and Telugu regnal dates on the reverse. The gold coins of the later Kadamba chiefs Vishnu Chittadeva and Jayakesin III bear their symbol, the lion passant on one side and a Nagari legened on the other.

In the second quarter of the 7th century, the Eastern Chalukya dynasty was established by Vishnuvardhana, brother of the great Pulakesin II, with its capital at Vengi, and their rule lasted till the 11th century, when the Cholas conquered them. The gold, silver and couper coins issued by Vishnuvardhana have a legened in Nagari or Canarese reading "sidhi", which stands for "Vishamasidhi", a title assumed by this king. The coins of the Eastern Chalukya kings have their insignia, the boar, in the centre, round which, each letter of the king's name is punched by a separate punch. The other side is blank. Large flat gold pieces depicting the boar symbol belong to the Eastern Chalukyan princes Saktivarman and Rajaraja. Sometimes, the Chalukyan coins bear the king's titles in Telugu script. The symbol of the lion appears on several fanams of the Eastern Chalukyas.

The first major power in the extreme south were the Pallavas. They ruled from the 6th to the 9th century A.D. with their capital at Kanchi. They were overwhelmed by the Cholas and Pandyas in the 9th century. On some of the earlier Pallava coins appear the bull and the two-masted ship, the latter indicating their maritime trade and powerful fleet. Their later pagodas and fanams bear the Pallava emblem. *i.e.*, the maned lion. On the reverse appear some of the emblems in imitation of the Āndhra currency, such as the *svastika*, the *chakra*, the *purnaghata*, the umbrella, the horse, the chaitya, etc. The Pallava coins, which are mostly in copper and silver, are die-struck and have a fine finish, The titles assumed by the Pallrva kings after

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
their conquests were also inscribed as legends to commemorate their victories.

The Pandyas had a variegated career. They began as an independent power, but were subjugated by the Pallavas. They regained their power once again in the 9th century only to be dominated by the Cholas in the 11th and 12th centuries. The Pandyas were the leading power in the south in the 13th century, but gradually their power faded away. In the earliest coins of the Pandyas, which are die-struck, the ancient square form is retained. On their obverse is portrayed an elephant while the reverse is blank. The Pandyan series is a large one with a variety of legends and emblems such as wheels, scrolls and cross. Between the 7th and 10th centuries, the gold and copper coins of the Pandya rulers, bear the fish emblem, sometimes singly and sometimes in pairs At times this emblem also occurs in conjunction with other symbols like the Chola standing figure and the Chalukyan boar. The inscsiption on the silver and gold coinage of the Pandyas is in Sanskrit and most of their copper coins have legends in Tamil. An interesting Pandyan coin suggests the umbrella and the fly-whisk of sovereignty achieved by the performance of the Asvamedha sacrifice as indicated by the horse.

The Cholas were paramount in southern India from the 10th to the 13th centuries and their empire extended upto the Deccan in the north and Ceylon in the south. The three important Chola emperors were Rajaraja the Great who ascended the throne in 985 A.D., his son Rajendra and Rajendra Kulottunga I. The earlier gold and silver coins of the dynasty before the accession of Rajaraja the Great depict a tiger, the dynastic emblem of the Cholas, seated under a canopy along with the Pandyan fish. The Cholas issued coins with legends mostly in Nagari and sometimes in Tamil. Amongst the various types of coins issued by Rajaraja the most common variety shows the king on one side and a seated goddess on the other. The coins of Rajendra Chola bear his name Sri Rajendra or his title Gangaikonda Chola' and the emblems, tiger and the Pandyan fish. Some of the coins of Kulottunga I follow the standing king and seated goddess type of Rajaraja. His other varieties show the

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

royal insignia, the tiger flanked by the bow and fish, the emblems of the subjugated Cheras and Pandyas respectively. The royal insignia of the umbrella has been depicted on such coins of the Cholas to emphasise their paramount sovereignty. The margin of the coins has a legend 'Kadaikonda Chola' or 'Malainadukonda Chola, each letter of which is punched separately. Such titles were used by the Chola kings on their coins to commemorate their conquests. The Chola coins served as an ideal for the coinage of Ceylon and were freely copied there.

After the decline of the Chola power in the south, the kingdom of Vijayanagara was established in 1336 A.D. by Harihara and his brothers to check the Muslim expansion to the South. It flourished under three successive dynasties until the battle of Talikota in 1565 A.D. Thereafter, the members of a fourth dynasty ruled as minor chiefs at Penugonda first and at Chandragiri later till the end of the 17th century. The Vijayanagara coinage shows a great variety in symbols and figures and several legends illustrate different rulers. Very small coins, probably as small as chilly seeds in gold were also issued. Vijayanagara coins are mostly 'varahans' or 'pagodas' which weigh 56 grains, with their half and quarter divisions. Their feudatories all over the south, that became independent after the collapse of the Vjayanagara empire, continued to issue coins of the pagoda type. Vijayanagar gold and copper coins have numerous devices, the most common ones being the bull, the elephant, various Hindu gods and goddesses such as Siva and Parvati, Vishnu with consorts, Hanuman, etc., and a double eagle holding an elephant in each beak and claw. The legends on early series of Vijayanagara coins are generally in Canarese and on the later ones in Devanagari

The Nayaks of Madura and Tanjore assumed independence after the decline of the Vijayanagara empire. On the reverse of their earlier coinage is inscribed the name of the chiefs in Tamil, but their later coins were struck in the name of Venkata. Still later we find copper coins with the Telugu legend 'Sri Vira' on the reverse and innumerable devices on the obverse, like Hanuman. Ganeśa, human figures, the elephant, bull, lion, a star, the sun and moon, etc.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

The kings of the Kerala country comprising of Travancore and Cochin and the district of Malabar were mostly under the sway of the Cholas. They assumed their independence under Ravivarman Kulasekhara known as Dakshina Bhoja. who was the most famous ruler of Kerala. The Kerala kings ruled from the 10th to the 14th century. The later tiny silver and gold coins of Kerala have a conch-shell on the obverse and a deity on the reverse. Its copper coinage in the 18th century shows a five-headed cobra on the obverse and the value of the coin in Tamil on the reverse.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Our Publications Ready for Sale

1. Founder of Sciences in Ancient India by Prof. Dr, Satya Prakash, D.Sc. *Price* : Rs. 60/- £4, $ 13 (Postage extra)

2. Coinage in Ancient India by Prof. Dr. Satya Prakash, D.Sc. & Dr. Rajendera Singh, M. Sc., D. Phil. Introduotory foreword by Prof. E.R. Caley, from U.S.A.
Price : Rs. 100/- £ 6, $ 20 (Postage Extra)

3. Śatapatha Brahmāṇa by Pt. Ganga Prasad Upadhyaya, M.A. English Introduction by Prof. Dr. Satya Prakash, D. Sc. (In three Volumes) *Price* : Rs. 60/- £ 4, $ 12 of each volume (Postage extra)

4. Geometry in Ancient India by Prof. Dr. Satya Prakash, D.Sc. & Pt. Ram Swarup Sharma, Director of the Institute (In three volumes). *Price* : Rs. 80/-, £ 5, $ 11 each volume (Postage extra).

5. Brahma Sphuta Siddhanta of Brahma Gupta by Pt. Ram Swrup Sharma Complete 4 Volumes.
Price : 260/- £ 18, $ 50 (Postage extra).

6. Samrat Siddhanta : 6 Volumes (Two are Published)
Price : Rs. 80/-, £4, $ 11 of each volume (Postage extra)

7. Vateswara Siddhanta by Vateswaracharya, Sanskrit & Hindi Commentaries by Chief Editor Pt. Ram Swarup Sharma, Director, Indian Institute of Astronomical & Sanskrit Research & Pt. Mukund Mishra, Jyotishacharya, Assistant Director, with an Introduction by Dr. Sampurṇanand, with opinion of Shri N.H Bhagwati (Retired Judge of Supreme Court, Vice-Chancellor of Hindu University, Varanasi).
Price : Rs. 40/-, £ 2, $ 6 (Postage extra)

8. Bharatiya Vigyan Ke Karnadhar, Hindi version of Founders of Sciences in Ancient India, translated by Shri Rajendra Dwevedi, and Pt. Om Dutt Shastri, M.A., M.O.L.
Price : Rs. 30/- (Postage extra)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

9. Trailokya Prakash, Hindi Translation by Pt. Ram Swarup Sharma, Director of the Institute Foreword by Dr. Banarsi Dass Jain, *Price* : Rs. 15/- £ 1, $ 2 (Postage extra)

10. Brahma Gupta and his works, by Dr. Satya Prakash, D.Sc. *Price* : Rs, 50/- (Postage extra)

11. Āpastamba Śulba Sūtram. The Sanskrit Commentaries of Kapardiswamin, Karvinda and Sundararaja with English Translation. *Price* : Rs. 50/- (Postage extra)

12. Baudhāyana Śulba Sūtram, Sanskrit Commentary by Dwarka Nath Yajvan and English Translation and Critical notes by Prof. G. Thibout. *Price* : Rs. 50/-. (Postage extra)

13. Ancient Indian Coinage. A Select Bibliography, by Bal Krishan M.A. *Price* : Rs. 15/- (Postage extra)

14. Brahma Sphute Siddhant Text with various readings Edited by Pt. Ram Swarup Sharma, Director of the Institute. *Price* Rs 50/-

Available :

MAHALAKSHMI PUBLISHING HOUSE
NEW DELHI (INDIA)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh